

REMARKS

The Office Action objected to the drawings and rejected claims 4 and 8-10 under Section 112. Claims 1-9, 11, 14 and 19 were rejected under 35 U.S.C. 102(a) as being anticipated by Kawai (U.S. Patent No. 6,642,617). Claim 20 was rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kawai. Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of Lin (U.S. Publication No. 6,806,578). Claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of *Electronic Packaging and Interconnection Handbook* by Charles A. Harper (Harper). Claims 12 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of *Microchip Fabrication* by Peter Van Zant (van Zant). Claims 15 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of Pohjonen (U.S. Patent No. 6,462,950). Claim 17 was rejected under 35 U.S.C. 103 (a) as being unpatentable over Kawai in view of Pohjonen and Van Zant. Claim 18 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of Apel (U.S. Patent No. 6,727,761). Finally, claims 1-20 were provisionally rejected under the doctrine of obviousness-type double-patenting as unpatentable over claims 1 and 3-14 of co-pending application 10/843,409.

The Drawing Objection and Section 112 Rejections

The Drawing and the claims have been amended. Withdrawal of the objection and rejections is requested.

The Section 102 Rejection

In regards to claim 1, the Office Action asserts that Kawai discloses the following:

- a) one or more active substrates (12a) comprising substantially transistors or diodes (10) formed thereon (For Example: See Figure 3 and Column 5 Lines 45 and 46);
- b) one or more passive substrates (2a) comprising substantially inductors, capacitors or resistors (4) formed thereon (For Example: See Figure 3 and Column 4 Lines 17-20);
- c) a plurality of bonding pads (15a and 5b) positioned on the active and passive substrates (For Example: See Figure 1);
- d) bonding wires (6) connected to the bonding pads (For Example: See Figure 1).

Applicants respectfully traverse the rejection. Kawai relates to a semiconductor device with a SAW device chip provided on a passive element chip in which a passive element circuit including a transmission line is formed on a semi-insulating compound substrate having one surface set to have a ground potential electrode. In the semiconductor device, even when the width of the transmission line is increased, a high characteristic impedance can be maintained by increasing the thickness of the substrate. This can reduce the resistance of the transmission line and can facilitate matching with the SAW device.

However, Kawai fails to a plurality of active substrates comprising substantially transistors or diodes formed thereon as well as a plurality of bonding pads positioned on the active and passive substrates including intra-substrate pads adapted to support wire-bonding within a substrate.

Since Kawai fails to show at least two elements of the independent claim 1, Kawai cannot anticipate claim 1.

Moreover, Kawai cannot anticipate any of the dependent claims that depend from allowable claim 1. Additionally, in regards to claims 6-7, Kawai shows a passive substrate but fails to show a passive IC connected to the active substrate. For claim 19, Kawai does not show filters, baluns, or diplexers. In regards to claim 20, the office action admitted that Kawai fails to disclose the passive substrate is fabricated using fewer fabrication steps than the active substrate. Hence, claim 20 is patentable over Kawai.

The Section 103 Rejections

The Office Action rejected claim 3 under 35 U.S.C. 103(a) as unpatentable over Kawai in view of Lin. Claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of *Electronic Packaging and Interconnection Handbook* by Charles A. Harper (Harper). Claims 12 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of *Microchip Fabrication* by Peter Van Zant (van Zant). Claims 15 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of Pohjonen (U.S. Patent No. 6,462,950). Claim 17 was rejected under 35 U.S.C. 103 (a) as being unpatentable over Kawai in view of Pohjonen and Van Zant. Claim 18 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of Apel (U.S. Patent No. 6,727,761).

First, as discussed above, the claims are allowable as none of the references show a device with a plurality of active substrates comprising substantially transistors or diodes formed thereon; one or more passive substrates comprising substantially inductors, capacitors or resistors formed thereon; a plurality of bonding pads positioned on the active and passive substrates including intra-substrate pads adapted to support wire-bonding within a substrate; and bonding wires connected to the bonding pads.

As Kawai fails to show a number of elements of the claims, withdrawal of the Section 103 rejection is requested.

Moreover, Applicant notes that the present rejection does not establish *prima facie* obviousness under 35 U.S.C. § 103 and M.P.E.P. §§ 2142-2143. The Examiner bears the initial burden to establish and support *prima facie* obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976). To establish *prima facie* obviousness, three basic criteria must be met. M.P.E.P. § 2142. First, the Examiner must show some suggestion or motivation, either in the Kawai reference or in the knowledge generally available to one of ordinary skill in the art, to modify the reference so as to produce the claimed invention. M.P.E.P. § 2143.01; *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Secondly, the Examiner must establish that there is a reasonable expectation of success for the modification. M.P.E.P. § 2142. Thirdly, the Examiner must establish that the prior art references teach or suggest all the claim limitations. M.P.E.P. §2143.03; *In re Royka*, 180 U.S.P.Q. 580 (CCPA 1974). The teachings, suggestions, and reasonable expectations of success must be found in the prior art, rather than in Applicant's disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (CAFC 1991). Applicant respectfully submits that a *prima facie* case of obviousness has not been met because the Examiner's rejection fails on at least two of the above requirements.

Under *Vaeck*, absent any evidence of a cited suggestion or reasonable motivation in the Norand reference, or knowledge of those skilled in the art, *prima facie* obviousness of the independent claims (and those dependent therefrom) has not been established. As such, it is respectfully requested that the § 103(a) rejection of all claims be withdrawn and the claims be allowed.

The Obviousness Type Double Patenting Rejection

Claims 1-20 were provisionally rejected under the doctrine of obviousness-type double-patenting as unpatentable over claims 1 and 3-14 of co-pending application 10/843,409. Applicants attach a Terminal Disclaimer to overcome the rejection. Withdrawal of the obviousness type double patenting rejection is requested.

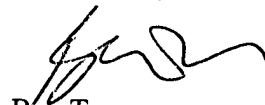
CONCLUSION

Applicants submit that all claims are in condition for allowance.

If for any reason the Examiner believes that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned at (408) 528-7490.

Authorization is granted to change to Deposit Account 501861.

Respectfully submitted,



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